

CLAIMS

What is claimed is:

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1. A pharmaceutical formulation comprising:

- (a) a therapeutically effective amount of at least one pharmaceutical compound;
and
- (b) a pharmaceutically acceptable protectant comprising
 - (i) a water-soluble acid neutralizer; and
 - (ii) a water-insoluble acid neutralizer.

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2. The formulation of claim 1 wherein the pharmaceutical compound is acid-labile.

3. The formulation of claim 2 wherein the pharmaceutical compound is a proton pump inhibitor.

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4. The formulation of claim 3 wherein the pharmaceutical compound is lansoprazole, an enantiomer of lansoprazole, or a pharmaceutical salt thereof.

5. The formulation of claim 1 wherein the water-soluble acid neutralizer is selected from tromethamine, meglumine, sodium bicarbonate, sodium carbonate, and combinations of tromethamine, meglumine, sodium bicarbonate, and sodium carbonate.

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6. The formulation of claim 1 wherein the water-insoluble acid neutralizer is selected from the group consisting of magnesium hydroxide, aluminum hydroxide, dihydroxy aluminum sodium carbonate, calcium carbonate, and combinations of magnesium hydroxide, aluminum hydroxide, dihydroxy aluminum sodium carbonate, and calcium carbonate.

7. The formulation of claim 3 further comprising a proton pump inhibitor enhancer.

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8. The formulation of claim 7 wherein the pharmaceutical compound is lansoprazole, an enantiomer of lansoprazole, or a pharmaceutical salt thereof.

9. A pharmaceutical formulation for treating gastric acid disorders, said pharmaceutical composition comprising:

- (a) a therapeutically effective amount of a proton pump inhibitor; and
- (b) a pharmaceutically acceptable protectant surrounding said proton pump inhibiting composition, said pharmaceutically acceptable protectant including

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- (i) a water-soluble acid neutralizer, and
- (ii) a water-insoluble acid neutralizer.

10. A pharmaceutical composition as in Claim 9, the water-soluble acid neutralizer comprising one or more of tromethamine, meglumine, sodium bicarbonate, and sodium carbonate.

11. A formulation of claim 9 wherein the water-soluble acid neutralizer is selected from tromethamine, meglumine, sodium bicarbonate, sodium carbonate, and combinations of tromethamine, meglumine, sodium bicarbonate, and sodium carbonate.

12. The formulation of claim 9 wherein the water-insoluble acid neutralizer is selected from the group consisting of magnesium hydroxide, aluminum hydroxide, dihydroxy aluminum sodium carbonate, calcium carbonate, and combinations of magnesium hydroxide, aluminum hydroxide, dihydroxy aluminum sodium carbonate, and calcium carbonate.

13. The formulation of claim 9 wherein the proton pump inhibitor is lansoprazole, an enantiomer of lansoprazole or a pharmaceutically acceptable salt thereof.

14. A method for protecting a pharmaceutical compound from gastric fluid degradation comprising the steps of: combining a therapeutically effective amount of at least one pharmaceutical compound, with a pharmaceutically acceptable protectant to thereby protect the pharmaceutical compound, wherein the pharmaceutically acceptable protectant comprises a water-soluble acid neutralizer and a water-insoluble acid neutralizer.

15. The method of claim 14 wherein the pharmaceutical compound is acid labile.

16. The method of claim 15 wherein pharmaceutical compound is lansoprazole, an enantiomer of lansoprazole, or a pharmaceutical salt thereof, including selecting at least one of magnesium hydroxide, aluminum hydroxide, and calcium carbonate as the water-insoluble acid neutralizer.

17. A method for treating a physiological disorder comprising administering a pharmaceutically acceptable amount of the formulation of claim 1.

18. The method of claim 17 wherein the pharmaceutical compound is acid-labile.

19. The method of claim 18 wherein the pharmaceutical compound is a proton pump inhibitor.

20. The method of claim 19 wherein the pharmaceutical compound is lansoprazole, an enantiomer of lansoprazole, or a pharmaceutical salt thereof.

21. The method of claim 20 wherein the formulation further comprising a proton pump inhibitor enhancer.

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